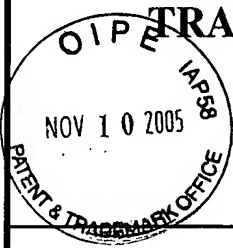


AF TFW 2143

 TRANSMITTAL FORM	Application No.:	10/017,304
	Filing Date:	December 11, 2001
	First Named Inventor:	Yao Wang, et al
	Confirmation No.	7237
	Group Art Unit	2143
	Examiner:	England, David E.
Customer No.		24227
Total Number of Pages in this Submission:		Docket No. EMC-01-201

ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Authorization for the Commissioner to charge Deposit Account No. 05-0889 for fees associated with this transaction (in duplicate) <input type="checkbox"/> Amendment/Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/Decl. <input type="checkbox"/> Extension of Time Request for _____ Months <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Request for Continued Examination Transmittal <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Fee Transmittal (in duplicate)	<input type="checkbox"/> Assignment <input type="checkbox"/> Recordation Cover Sheet <input type="checkbox"/> Declaration/Power of Attorney <input checked="" type="checkbox"/> Power of Attorney and Correspondence Address Indication Form <input checked="" type="checkbox"/> Statement Under 37 CFR 3.73(b) <input type="checkbox"/> Formal Drawings <input type="checkbox"/> Letter to Official Draftsperson with _____ (____) sheets of redlined changes to drawings <input type="checkbox"/> Copy of PTO 948, "Notice of Draftsperson's Patent Review" <input type="checkbox"/> Preliminary Amendment <input type="checkbox"/> Additional Enclosures:	<input type="checkbox"/> Petition for Revival of an Unintentionally Abandoned Application [37 CFR 1.137(b)] (in duplicate) <input type="checkbox"/> Status Inquiry <input type="checkbox"/> Form PTOL-85B, Part B -Issue Fee Payment Transmittal," (in duplicate) <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Power of Attorney <input type="checkbox"/> Statement Under 37 CFR 3.37(b) <input checked="" type="checkbox"/> Certificate of First Class Mailing <input type="checkbox"/> Certificate of Express Mail Mailing <input checked="" type="checkbox"/> Postcard
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SIGNATURE OF APPLICANT, ATTORNEY OR AGENT

Date <u>November 7, 2005</u>	<u>Robert K Perkins</u> Robert Kevin Perkins Esq. (Reg. No. 36,634) EMC Corporation Office of the General Counsel 176 South Street Hopkinton, MA 01748
Tel: (508) 293-6985 Fax: (508) 293-7189	

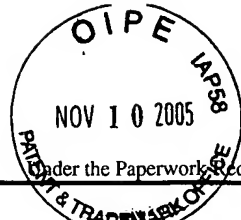
CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8]

I hereby certify that this correspondence and the above-referenced enclosures are being:

☒ Deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

☐ Transmitted by facsimile on the date shown below to the Patent and Trademark Office at (703)

Date <u>November 8, 2005</u>	<u>Sandra A Kulaga</u> Signature Sandra A. Kulaga Typed or printed name of person signing certificate
------------------------------	--



POWER OF ATTORNEY AND CORRESPONDENCE ADDRESS INDICATION FORM	Application Number	10/017,304
	Filing Date	December 11, 2001
	First Named Inventor	Yao Wang, et al
	Title	Network Management for Replication ...
	Art Unit	2143
	Examiner Name	England, David E.
	Attorney Docket Number	EMC-01-201

I hereby revoke all previous powers of attorney given in the above-identified application.

I hereby appoint:

☒ Practitioners associated with the Customer Number:

24227

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☒ The address associated with the above-mentioned Customer Number:

OR

☐ The address associated with Customer Number:

OR

☐ Firm or
Individual Name
Address

City

State

Zip

Country

Telephone

Email

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Signature	<i>John M. Gunther</i>	Date	11-7-05
Name	John M. Gunther	Telephone	508-293-7255
Title and Company	Vice President and Assistant General Counsel, EMC Corporation		

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: EMC Corporation

Application No./Patent No. 10/017,304 Filed/Issue Date: December 11, 2001

Entitled: Network Management for Replication of Data Stored in a Data Storage Environment

EMC Corporation

a

Corporation

(Name of assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
The extent (by percentage) of its ownership interest is _____ %

in the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 012390, Frame 0236, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

John M. Gunther
Signature
John M. Gunther
Printed or Typed Name

11-7-05
Date
508-293-7255
Telephone Number

Vice President and Assistant General Counsel

Title

26,715

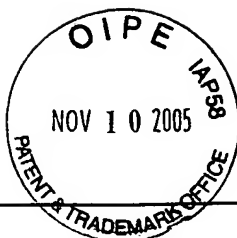
Registration Number

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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PATENT AND
TRADEMARK OFFICE



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FEBRUARY 14, 2002

PTAS

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov

EMC CORPORATION
ROBERT KEVIN PERKINS
OFFICE OF THE GENERAL COUNSEL
35 PARKWOOD DR.
HOPKINGTON, MA 01748



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UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/11/2001

REEL/FRAME: 012390/0236

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

WANG, YAO

DOC DATE: 12/05/2001

ASSIGNOR:

KENDLER, DAVID

DOC DATE: 12/05/2001

ASSIGNEE:

EMC CORPORATION
35 PARKWOOD DR.
HOPKINGTON, MASSACHUSETTS 01748

SERIAL NUMBER: 10017304

FILING DATE: 12/11/2001

PATENT NUMBER:

ISSUE DATE:

SHARON LATIMER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

Form PTO-1595
(Rev. 03/01)

OMB No. 0651-0027 (8-15519/2002)

Tab settings $\Rightarrow \Rightarrow \Rightarrow$

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12-28-2001



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ET

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please return the attached original documents or copy thereof.

1. Name of conveying party(ies):

Yao Wang
David Kendler

12.11.01

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other _____

Execution Date: December 5, 2001

2. Name and address of receiving party(ies)

Name: EMC Corporation

Internal Address: Office of the

General Counsel

Street Address: 35 Parkwood Dr

City: Hopkinton State: MA Zip: 01748

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: 12/11/01

A. Patent Application No.(s)

B. Patent No.(s)

10/017304

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Robert Kevin Perkins

Internal Address: EMC Corporation

Office of the General Counsel

Street Address: 35 Parkwood Dr

12/27/2001 6T0H11 00000234 050889 10017304

01 FC 581 40.00 CH

City: Hopkinton State: MA Zip: 01748

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$ 40.00

☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number:

05-0889

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Robert Kevin Perkins

Name of Person Signing

Signature

December 11, 2002

Date

Total number of pages including cover sheet, attachments, and documents: 5

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231JCESB U.S. PTO
10/017304
12/11/01

ASSIGNMENT

WHEREAS, we, Yao Wang and David Kendler, have invented an invention comprising and/or embodying certain improvements or discoveries or both as described in an application for Letters Patent of the United States entitled *NETWORK MANAGEMENT FOR REPLICATION OF DATA STORED IN A DATA STORAGE ENVIRONMENT*, the specification of which:

- ☒ is being executed on even date herewith and is about to be filed in the United States Patent Office;
- ☐ was filed on _____ as U.S. Application No. _____;
- ☐ was patented under U.S. Patent No. _____ on _____.

WHEREAS, EMC Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having a usual place of business at 35 Parkwood Drive, Hopkinton, Massachusetts 01748 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey to ASSIGNEE all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution,

-2-

reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals as set forth below:

Date:

12/05/2001


Inventor's Signature

Print full name of first inventor:

Yao Wang

Residence:

25 Hawthorne Road, Shrewsbury, MA 01545

Citizenship:

USA

Mailing Address:

25 Hawthorne Road, Shrewsbury, MA 01545

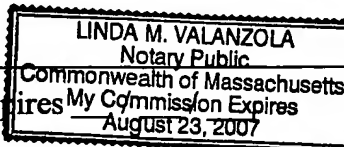
STATE/Commonwealth of
COUNTY OFMassachusetts
Middlesex

Then personally appeared before me the above-named Yao Wang and acknowledged that he executed the foregoing instrument as his free act and deed this 5 day of December, 2001.


Notary Public

Print Name: _____

My Commission expires



-3-

Date: 12/05/2001

David Kendler

Inventor's Signature

Print full name of second inventor:

David Kendler

Residence:

108 Andrew Street, Newton, MA 02461

Citizenship:

USA

Mailing Address:

108 Andrew Street, Newton, MA 02461

STATE/Commonwealth of
COUNTY OFMassachusetts
Middlesex

Then personally appeared before me the above-named David Kendler and acknowledged that he executed the foregoing instrument as his free act and deed this 5 day of December, 2001.

Linda M. Valanzola

Notary Public

Print Name:

My Commission expires

